NOTES ON THE STREAMS OF THE UPPER SAN JOAQUIN WATERSHED.

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Although more than normal rainfall occurred generally over the watershed of the upper San Joaquin during November, it came upon an unusually parched soil and there was very little run-off. Fluctuations in the streams were small and the stages at the close were only slightly higher than those at the beginning of the month.

Average stages for the month were low, but lower mean stages for all points are shown in the record for November, 1908 and 1910. Following are the mean gage heights for November this year and the 7-year average for the several stations: Merced Falls, 0.3 foot and -0.1 foot; Friant, -0.6 foot and -0.4 foot; Firebaugh, -0.9 foot and -0.3 foot; Piedra, 4.5 feet and 4.6 feet. Rainfall at Merced Falls and Firebaugh was greater than in any November of the last seven years, and at

Piedra and Friant it was exceeded only in 1909.